AMENDMENTS TO THE CLAIMS

Claims 1-59 (Canceled)

60. (Previously Presented) A method of fabricating a semiconductor device, comprising the steps of:

forming an amorphous silicon film on a substrate;

heat treating said amorphous silicon film by laser annealing, therein forming a polycrystalline silicon film;

forming an impurity region in said polycrystalline silicon film; and

rapidly heat treating said impurity region by rapid thermal annealing using a light source emitting sheet-type annealing light, therein activating said impurity region.

61. (Previously Presented) The method of fabricating a semiconductor device in accordance with claim 60, further comprising a step of forming an insulating film of 1000 to 6000 Å in thickness on said substrate and forming said amorphous silicon film on said insulating film.

62. (Previously Presented) The method of fabricating a semiconductor device in accordance with claim 60, wherein a xenon arc lamp is employed in said light source.

63. (Previously Presented) The method of fabricating a semiconductor device in accordance with claim 60, wherein said rapidly heat treating step comprises a step of preparing said light source by arranging a pair of lamps vertically opposed to each other, and carrying said substrate so as to pass between said pair of lamps.

64. (Previously Presented) The method of fabricating a semiconductor device in accordance with claim 60, wherein said rapid thermal annealing is performed a plurality of times.

65. (Previously Presented) The method of fabricating a semiconductor device in accordance with claim 60, wherein the heating temperature is increased stepwise from an initial time to a final time.

66. (Previously Presented) A method of fabricating a semiconductor device, comprising the steps of:

forming an amorphous silicon film on a substrate;

heat treating said amorphous silicon film by laser annealing performed by applying a laser beam in the form of a sheet, therein forming a polycrystalline silicon film;

forming an impurity region in said polycrystalline silicon film; and

rapidly heat treating said impurity region by rapid thermal annealing using a light source emitting sheet-type annealing light, therein activating said impurity region.

67. (Previously Presented) The method of fabricating a semiconductor device in accordance with claim 66, further comprising a step of forming an insulating film of 1000 to 6000 Å in thickness on said substrate and forming said amorphous silicon film on said insulating film.

68. (Previously Presented) The method of fabricating a semiconductor device in accordance with claim 66, wherein a xenon arc lamp is employed in said light source.

69. (Previously Presented) The method of fabricating a semiconductor device in accordance with claim 66, wherein said rapidly heat treating step comprises a step of preparing said light source by arranging a pair of lamps vertically opposed to each other, and carrying said substrate so as to pass between said pair of lamps.

70. (New) The method of fabricating a semiconductor device in accordance with claim 60, wherein said light source is composed of a lamp and a reflecting mirror covering the lamp for emitting sheet-type annealing light.

71. (New) The method of fabricating a semiconductor device in accordance with claim 60, wherein said light source is composed of a lamp and a reflecting mirror for reflecting the light from the lamp so as to emit sheet-type annealing light.

72. (Previously Presented) The method of fabricating a semiconductor device in accordance with claim 60, wherein said impurity region is rapidly heat treated for three seconds or less.

73. (New) The method of fabricating a semiconductor device in accordance with claim 66, wherein said light source is composed of a lamp and a reflecting mirror, covering the lamp for emitting sheet-type annealing light.

74. (New) The method of fabricating a semiconductor device in accordance with claim 66, wherein said light source is composed of a lamp and a reflecting mirror for reflecting the light from the lamp so as to emit sheet-type annealing light.

75. (New) The method of fabricating a semiconductor device in accordance with claim 66, wherein said impurity region is rapidly heat treated for three seconds or less.